

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

The specification has been amended to correct grammatical and typographical errors found therein, including the ones noted on page 2 of the Office Action. No new matter is believed to have been added.

No claims are currently being added or canceled.

Claims 1-3, 9-11, 15-17 and 29-31 are currently being amended.

This amendment amends claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-31 are now pending in this application.

§ 112, Second Paragraph Rejection:

In the Office Action, claims 1-31 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, for allegedly being "generally narrative and indefinite, failing to conform to current U.S. practice." The claims have been amended to more clearly recite the claimed subject matter (without affecting the scope of these claims), whereby it is believed that presently pending claims 1-31 fully conform to 35 U.S.C. § 112, second paragraph.

§ 102 Rejection Over H06-175844 and 0076805:

In the Office Action, claims 1-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Unexamined Patent Application Publication H06-175844 and Republic of Korea Registered Utility Model Publication 0076805, as listed in an Information Disclosure Statement filed on June 19, 2003. It appears from the statements made on page 3 of the Office Action that

the Examiner is "piggy-backing" on rejections made for counterpart applications, whereby such piggy-backing is not proper, since: a) the scope of the counterpart claims may be much different from the presently pending claims, and b) this does not provide a prima facie case with regards to the features recited in the presently pending claims. In any event, Applicant's representative has provided non-verified English language translations, at Applicant's expense, so that the Examiner can review the entirety of these references.

A review of these English language translations shows that none of the references listed in the IDS filed on June 19, 2003, discloses or suggests a program generating section that generates a program and an event pseudo-generating routine for pseudo-generating an event based on a state transition matrix, in which the state transition matrix has a plurality of cells, each of which being defined by: a) a state in which the system to be a subject of a program development is enabled to operate, and b) an event which corresponds to an input to the system. Furthermore, none of the references discussed above discloses or suggests a feature in which each cell of the state transition matrix also includes information corresponding to a process to be executed by the system and a transition destination state corresponding to a state to be transitioned to when a corresponding event occurs during a corresponding state. In particular, please refer to the state transition table shown in Figure 3 of the drawings, for example.

Still further, none of the references discussed above discloses or suggests an analysis section for starting an emulation of the program from a state input as an initial state and for referring to the pseudo-generating information and rewriting information for pseudo-generating the event stored in a memory section used in executing the event pseudo-generating routine into information corresponding to the event which is instructed to occur.

Accordingly, since the above features are recited in each of the presently pending independent claims, these claims are patentable.

Note also, with respect to the features recited in Independent claims 3 and 17, these claims are directed to the second embodiment, in which a script

generating section generates a script file in which an occurrence timing of each event and a timing at which an element in the system operates in accordance with a specification are described based on an input event log, in which a script analysis section sequentially outputs position information of each event described in the script file and of a corresponding display area in a state-transition matrix displayed on a display section in order and at an occurrence timing described in the script file, and an analysis section which utilizes the position information to pseudo-generate an event into information corresponding to an event code.

Accordingly, independent claims 3 and 17 are patentable for these additional reasons.

Therefore, none of the presently pending independent claims are disclosed, taught or suggested by Japanese Unexamined Patent Application Publication H06-175844 or by Republic of Korea Registered Utility Model Publication 0076805.

The dependent claims are patentable due to their respective dependencies on one of the presently pending independent claims, as well as for the specific features recited in those claims. For example, with respect to claims 12-14, these claims recite that the event is any one of a message-type, a flag-type, an interrupt-type, an in-mail type, and a function-call type, with each of those types more fully defined in these claims. None of the above-mentioned two references discloses or suggests such features. For example, there is no disclosure or suggestion in these two references of a function-call type event that calls a function executing a group of processes. Accordingly, claims 12-14 are patentable for these additional reasons.

With respect to claims 9-11, these claims have been amended to recite that the program includes: a) a main routine for executing main processes of the system, and b) an event normal generating routine for, based on a signal supplied from the system due to operator selection performed on the system, detecting the operator selection and notifying said main routine of the operator selection, and wherein said pseudo-generating routine is automatically generated

in a programming language that is the same as or similar to a programming language of said main routine. Such features, which are obtained from page 21 of the specification, are not disclosed or suggested by either of the two above-cited references. Accordingly, claims 9-11 are patentable for these additional reasons.

§ 103 Rejection over Takuma et al.

In the Office Action, claims 1-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,141,791 to Takuma et al. in view of U.S. Patent No. 5,828,829 to Yamauchi et al. These rejections are respectfully traversed.

The Office Action correctly recognizes that Takuma et al. does not disclose or suggest a state-transition matrix and an event pseudo-generating routine, but it incorrectly asserts that Yamauchi et al. discloses these features.

While Figure 3 of Yamauchi et al. shows a state table and a transition table, and while column 9, lines 31-39 of Yamauchi et al. describes these tables, these portions of Yamauchi et al. do not teach or suggest all of the feature of the claimed state transition matrix as recited in the presently pending independent claims.

In particular, as recited in claim 1, each cell of the state transition matrix is defined by: a) a state in which the system to be a subject of a program development is enabled to operate, and b) an event which corresponds to an input to the system. Each cell of the state transition matrix also includes information corresponding to a process to be executed by the system and a transition destination state corresponding to a state to be transitioned to when a corresponding event occurs during a corresponding state. Note that the claimed state transition matrix has a "cell" for every possible state for each event, and vice versa it has a "cell" for every possible "event" for each state. Such features are not taught or suggested by the State Table and the Transition Table shown in Figure 3 of Yamauchi et al.

Still further, as correctly recognized in the Office Action, Takuma et al. does not teach or suggest the claimed analysis section, but the Office Action incorrectly asserts that Yamauchi et al. teaches these features. In particular, the claimed analysis section refers to pseudo-generating information and rewrites information for pseudo-generating an event stored in a memory section used in executing an event-generating routine into information corresponding to the event which is instructed to occur. With all due respect, neither column 9, lines 11-25 nor column 9, lines 48-64 of Yamauchi et al. teaches or suggests such features. Rather, column 9, lines 11-25 of Yamauchi et al. describes that a developer uses operation specification inputting means to enter a state transition model, and column 9, lines 48-64 of Yamauchi et al. describes that the developer sets up a test sequence which referencing the operation specification, whereby the developer specifies transitions in order to specify a test sequence, and whereby the test sequence is stored in a storing means. No rewriting of information for pseudo-generating an event, as performed by an analysis unit, is disclosed or suggested in these portions of Yamauchi et al.

Accordingly, all of the presently pending independent claims are patentable over the combined teachings of Takuma et al. and Yamauchi et al.

Furthermore, with respect to the features recited in independent claims 3 and 17, these claims are directed to the second embodiment, in which a script generating section generates a script file in which an occurrence timing of each event and a timing at which an element in the system operates in accordance with a specification are described based on an input event log, in which a script analysis section sequentially outputs position information of each event described in the script file and of a corresponding display area in a state-transition matrix displayed on a display section in order and at an occurrence timing described in the script file, and an analysis section which utilizes the position information to pseudo-generate an event into information corresponding to an event code.

No such features are disclosed or suggested by Yamauchi et al., whereby the Office Action correctly recognizes that such features are not disclosed or

suggested by Takuma et al. In particular, Figure 24 and column 8, lines 55-62 of Yamauchi et al. describes a test support system with input contents determining means that are composed of an operation, objection identification, and operation target for testing a test sequence based on the object identification and input items associated with a plurality of transitions in a test sequence. With all due respect, this disclosure in Yamauchi et al. falls very short of teaching or suggested the above-mentioned "script" features of claims 3 and 17.

Accordingly, independent claims 3 and 17 are patentable for these additional reasons.

The dependent claims are patentable due to their respective dependencies on one of the presently pending independent claims, as well as for the specific features recited in those claims. For example, with respect to claims 12-14, these claims recite that the event is any one of a message-type, a flag-type, an interrupt-type, an in-mail type, and a function-call type, with each of those types more fully defined in these claims. Column 3, lines 21-45 of Yamauchi et al., as well as Figure 27 of Yamauchi et al., which the Office Action alleges teaches these features, do not do so. Rather, they merely describes different states and different events for a "coin counter", whereby these states appear to be sequentially driven based on the occurrence of particular events. For example, there is no disclosure or suggestion in column 3 of Yamauchi et al. of a function-call type event that calls a function executing a group of processes. Accordingly, claims 12-14 are patentable for these additional reasons.

With respect to claims 9-11, these claims have been amended to recite that the program includes: a) a main routine for executing main processes of the system, and b) an event normal generating routine for, based on a signal supplied from the system due to operator selection performed on the system, detecting the operator selection and notifying said main routine of the operator selection, and wherein said pseudo-generating routine is automatically generated in a programming language that is the same as or similar to a programming language of said main routine. Such features, which are obtained from page 21

of the specification, are not disclosed or suggested by the combined teachings of Takuma et al. and Yamauchi et al. Accordingly, claims 9-11 are patentable for these additional reasons.

§103 Rejection Over H12-020347 and H05-324385:

In the Office Action, claims 1-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Unexamined Patent Application Publication H12-020347 and Japanese Unexamined Patent Application Publication H05-324385, as listed in an Information Disclosure Statement filed on October 28, 2002. It appears from the statements made on pages 16 and 17 of the Office Action that the Examiner is "piggy-backing" on rejections made for counterpart applications, whereby such piggy-backing is not proper, since: a) the scope of the counterpart claims may be much different from the presently pending claims, and b) this does not provide a prima facie case with regards to the features recited in the presently pending claims. In any event, Applicant's representative has provided non-verified English language translations, at Applicant's expense, so that the Examiner can review the entirety of these references. These translations are machine translations obtained from the Japanese patent office web site.

A review of these English language translations shows that none of the references listed in the IDS filed on October 28, 2002, discloses or suggests a program generating section that generates a program and an event pseudo-generating routine for pseudo-generating an event based on a state transition matrix, in which the state transition matrix has a plurality of cells, each of which being defined by: a) a state in which the system to be a subject of a program development is enabled to operate, and b) an event which corresponds to an input to the system. Furthermore, none of the references discussed above discloses or suggests a feature in which each cell of the state transition matrix also includes information corresponding to a process to be executed by the system and a transition destination state corresponding to a state to be transitioned to when a corresponding event occurs during a corresponding state. In

particular, please refer to the state transition table shown in Figure 3 of the drawings, for example.

Still further, none of the references discussed above discloses or suggests an analysis section for starting an emulation of the program from a state input as an initial state and for referring to the pseudo-generating information and rewriting information for pseudo-generating the event stored in a memory section used in executing the event pseudo-generating routine into information corresponding to the event which is instructed to occur.

Accordingly, since the above features are recited in each of the presently pending independent claims, these claims are patentable.

Note also, with respect to the features recited in independent claims 3 and 17, these claims are directed to the second embodiment, in which a script generating section generates a script file in which an occurrence timing of each event and a timing at which an element in the system operates in accordance with a specification are described based on an input event log, in which a script analysis section sequentially outputs position information of each event described in the script file and of a corresponding display area in a state-transition matrix displayed on a display section in order and at an occurrence timing described in the script file, and an analysis section which utilizes the position information to pseudo-generate an event into information corresponding to an event code.

Accordingly, independent claims 3 and 17 are patentable for these additional reasons.

Therefore, none of the presently pending independent claims are disclosed, taught or suggested by Japanese Unexamined Patent Application Publication H12-020347 or by Japanese Unexamined Patent Application Publication H05-324385.

The dependent claims are patentable due to their respective dependencies on one of the presently pending independent claims, as well as for the specific features recited in those claims. For example, with respect to claims 12-14,

these claims recite that the event is any one of a message-type, a flag-type, an interrupt-type, an in-mail type, and a function-call type, with each of those types more fully defined in these claims. None of the above-mentioned two references discloses or suggests such features. For example, there is no disclosure or suggestion in these two references of a function-call type event that calls a function executing a group of processes. Accordingly, claims 12-14 are patentable for these additional reasons.

With respect to claims 9-11, these claims have been amended to recite that the program includes: a) a main routine for executing main processes of the system, and b) an event normal generating routine for, based on a signal supplied from the system due to operator selection performed on the system, detecting the operator selection and notifying said main routine of the operator selection, and wherein said pseudo-generating routine is automatically generated in a programming language that is the same as or similar to a programming language of said main routine. Such features, which are obtained from page 21 of the specification, are not disclosed or suggested by either of the two above-cited references. Accordingly, claims 9-11 are patentable for these additional reasons.

§ 103 Rejection Over Integrated CASE environment article:

In the Office Action, claims 1, 2, 6-10 and 14-17 were rejected under 35 U.S.C. § 102(b) as being anticipated by Integrated CASE environment for microcomputer software, as listed in an Information Disclosure Statement filed on August 6, 2003. It appears from the statements made on page 17 of the Office Action that the Examiner is "piggy-backing" on rejections made for counterpart applications, whereby such piggy-backing is not proper, since: a) the scope of the counterpart claims may be much different from the presently pending claims, and b) this does not provide a prima facie case with regards to the features recited in the presently pending claims. In any event, Applicant's representative has provided a non-verified English language translation, at

Applicant's expense, so that the Examiner can review the entirety of this reference.

A review of this English language translation shows that the CASE document does not disclose or suggest a program generating section that generates a program and an event pseudo-generating routine for pseudo-generating an event based on a state transition matrix, in which the state transition matrix has a plurality of cells, each of which being defined by: a) a state in which the system to be a subject of a program development is enabled to operate, and b) an event which corresponds to an input to the system. Furthermore, the CASE document does not disclose or suggest a feature in which each cell of the state transition matrix also includes information corresponding to a process to be executed by the system and a transition destination state corresponding to a state to be transitioned to when a corresponding event occurs during a corresponding state. In particular, please refer to the state transition table shown in Figure 3 of the drawings, for example.

Still further, the CASE document does not disclose or suggest an analysis section for starting an emulation of the program from a state input as an initial state and for referring to the pseudo-generating information and rewriting information for pseudo-generating the event stored in a memory section used in executing the event pseudo-generating routine into information corresponding to the event which is instructed to occur.

Accordingly, since the above features are recited in each of the presently pending independent claims, these claims are patentable.

Note also, with respect to the features recited in independent claim 17 (claim 3 was not rejected over the CASE document), that claim is directed to the second embodiment, in which a script generating section generates a script file in which an occurrence timing of each event and a timing at which an element in the system operates in accordance with a specification are described based on an input event log, in which a script analysis section sequentially outputs position information of each event described in the script file and of a

corresponding display area in a state-transition matrix displayed on a display section in order and at an occurrence timing described in the script file, and an analysis section which utilizes the position information to pseudo-generate an event into information corresponding to an event code.

Accordingly, independent claim 17 is patentable for these additional reasons.

Therefore, claims 1, 2, 6-10 and 14-17 are not disclosed, taught or suggested by the CASE document.

The dependent claims are patentable due to their respective dependencies on one of the presently pending independent claims, as well as for the specific features recited in those claims. For example, with respect to claim 14, this claim recite that the event is any one of a message-type, a flag-type, an interrupt-type, an in-mail type, and a function-call type, with each of those types more fully defined in these claims. The CASE document does not disclose or suggest such features. For example, there is no disclosure or suggestion in the CASE document of a function-call type event that calls a function executing a group of processes. Accordingly, claim 14 is patentable for these additional reasons.

With respect to claims 9 and 10, these claims have been amended to recite that the program includes: a) a main routine for executing main processes of the system, and b) an event normal generating routine for, based on a signal supplied from the system due to operator selection performed on the system, detecting the operator selection and notifying said main routine of the operator selection, and wherein said pseudo-generating routine is automatically generated in a programming language that is the same as or similar to a programming language of said main routine. Such features, which are obtained from page 21 of the specification, are not disclosed or suggested by the CASE document. Accordingly, claims 9 and 10 are patentable for these additional reasons.

Therefore, since there are no other objections or rejections raised in the Office Action, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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